DOCUMENT RESUME

ED 361 602 CE 064 634

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TITLE Predictors of Grade-Level Advancement in a Job Opportunities and Basic Skills Program.
PUB DATE 93
NOTE 85p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC04 Plus Postage.
DESCRIPTORS *Academic Achievement; *Adult Basic Education; Adult Literacy; *Basic Skills; Economically Disadvantaged; Educational Research; *Females; Literacy Education; Literature Reviews; Low Income Groups; *Predictor Variables; Pretests Posttests; Student Improvement; Welfare Recipients; *Womens Education
IDENTIFIERS Aid to Families with Dependent Children; *Job Opportunities and Basic Skills Program; Tests of Adult Basic Education

ABSTRACT

A study was conducted to determine: (1) if instruction correlated to the Tests of Adult Basic Education (TABE) resulted in improved basic skills for participants in the Job Opportunities and Basic Skills (JOBS) Program; and (2) to determine the impact of selected factors on grade-level advancement (pre- versus posttest TABE scores). A literature review related to adult literacy and the work force was conducted. The research sample consisted of 108 women who received Aid to Families with Dependent Children. The study used an ex post facto design. Independent variables were as follows: target group membership, referral status, education, age, instructional time, and TABE pretest scores. Grade-level advancement in reading, math, and language were dependent variables. The effects of the independent variables on the dependent variable grade-level advancement in each of the three subject areas were determined. Significant associations between three independent variables and grade-level advancement were determined: target group membership and language, referral status and language, and instructional time and math. The multiple regression analyses identified two independent variables with significant relationships to grade-level advancement: instructional time and target group membership. Target group membership had three levels: long-term AFDC recipients, custodial parents with less than 12th-grade education, and participants not part of a JOBS target group. Participants in the first group achieved greater gains in posttest scores. TABE appeared not to be an appropriate measure because of the middle-class orientation of many test items. (Appendixes include a table showing federal AFDC welfare-to-work provisions before and under JOBS, and list of instruments that measure affective attributes. Contains 35 references.) (YLB)

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ED 361 602

PREDICTORS OF GRADE-LEVEL ADVANCEMENT IN A JOB OPPORTUNITIES AND BASIC SKILLS PROGRAM

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I. INTRODUCTION

Background Information

This research focused on the Alabama welfare assisted population, primarily women. Within this population, 42% of the mothers receiving assistance did not have a high school diploma (State of Alabama Department of Education, 1989). Specifically, the study investigated the basic skills improvement of participants in the Alabama Job Opportunities and Basic Skills (JOBS) program.

Silvanik (1991) reported that 23 to 70 million adults in the United States were deficient in basic skills. Research indicated that one in five American employees read at or below the eighth-grade level, and one in every eight read at the fourth-grade level. However, the reading level required in a sampled cross-section of jobs was between the eighth- and twelfth-grade (Mikulecky, 1990).

The term functional incompetence was used interchange-interchangeably with adult illiteracy and basic skills deficiencies throughout this research. The Adult

Performance Level study (U.S. Office of Education, Department of Health, Education, and Welfare, 1977) defined functional competency as "The ability to write, read, and compute with the functional competence needed for meeting the requirements of adult living" (p. 2). The emphasis of this definition was on the latter part, "...meeting the requirements of adult living" (U.S. Office of Education, Department of Health, Education, and Welfare, 1977). The identified requirements of adult living, as measured by test results and indicators of success, were income, education, and employment. This study resulted in the classification of 19.1% of the U.S. population as functionally incompetent (Newman & Beverstock, 1990).

Berlin and Sum (1988) confirmed a relationship between basic skills and income, education, and employment. Individuals with low levels of basic academic skills, such as reading and math, were more likely to have low earnings and high poverty rates than those with higher skills.

Adult illiteracy costs the United States more than $220 billion annually in job incompetency, lost taxes, social welfare programs, and crimes (Silvanik, 1991). In recognition of the problems associated with illiteracy, Lewis (1992) reported that the governors and the President

established the following goal during the 1989 Education Summit: "Goal Five stated that by the same date (2000), all Americans will have literacy skills good enough to make them productive workers and involved citizens" (p. 2).

During their attempt to produce productive workers, welfare-to-work administrators were met with a shift in the economy from manufacturing to service industries. Service industries were projected to represent a much larger segment of the economy as the United States enters the 21st century. The new jobs, created by the service industries, will demand higher skill levels than past or current jobs. Only a limited number of new jobs will be created for individuals who cannot read, follow directions, add and subtract, or demonstrate the ability to speak and think clearly (Johnston & Packer, 1987).

Besides an economical shift within the U.S. economy, the projected composition of the work force for the year 2000 will be strikingly different from that of the 20th century. As the "baby boom" generation ages, the median age of the labor force will increase from 36.6 to 39.4 years (U.S. Department of Labor, 1992), and 75% of the current labor force will still be employed in the year 2000 (Silvanik, 1991). In addition, the Department of Labor

estimated that 33% of the population will be over the age of 55 by the beginning of the next century (U.S. Department of Labor, 1992).

Recent trends indicated that early retirement was changing with an increased number of employees opting to remain in the work force up to and beyond the age of 65. Several factors appeared to have provided the impetus for employees deferring retirement, for example, people have been living longer, healthier lives, and they have desired to remain productive in their later years. Also, increased longevity and higher inflation have created economic pressures for many older persons, forcing them to work to supplement inadequate retirement incomes (Education Resources Information Center, 1992).

Because of birth rates during the past two decades, a decreased number of younger employees were projected to be available for the work force by the year 2000. This slower population growth was predicted to ultimately create a critical shortage of skilled labor in many areas of the work force. A prediction was that older employees will be needed during this time to maintain the nation's productivity (Educational Resources Information Center, 1992).

In addition to the age factor of the forthcoming work force, Johnston and Packer (1987) discussed other demographic variables affecting the future workforce. These were women, non-whites, and immigrants who were expected to make up more than 83% of the new additions to the work force by the end of the century.

Women were predicted to account for almost 67% of the new work force entrants and non-whites expected to comprise 29% of the labor force between now and the year 2000. Immigrants would represent the largest increase in the population and the work force since World War I (Johnston & Packer, 1987).

Along with demographic changes in the work force and the shrinking labor market, the educational needs of the employees were projected to change. In response to these educational needs coupled with the large number of individuals classified as functionally illiterate, legislation was enacted to assist the economically and academically disadvantaged in becoming employed and more self-sufficient. The welfare legislation, referred to as the Family Support Act of 1988, was based on the following assumption: The way off welfare was through more education, training, work

experience, and appropriate interim supports such as child care, transportation, and medicaid (Education Writers Association, 1988).

Title II of the Family Support Act created the JOBS program for recipients of Aid to Families with Dependent Children (Department of Health and Human Services, 1989). This newly created program was the impetus for increasing the poor families' self-sufficiency (Gueron & Pauly, 1991).

The JOBS program targeted welfare recipients, a possible segment of the projected work force for the year 2000. The targeted group was predominantly women who lacked the basic skills required to participate in the labor market. Therefore, the challenge of the JOBS program was to design employment programs for welfare recipients that take advantage of employers' increased willingness to hire individuals from disadvantaged backgrounds (Porter, 1990).

Basic education has been the foremost activity for JOBS participants entering the program (Manpower Demonstration Research Corporation, 1991). The Tests of Adult Basic Education (TABE) and a correlated curriculum were selected as an integral part of the Alabama JOBS program design. The curriculum was aimed at improving the basic skills of

participants in the JOBS program, thereby making them better prepared to enter the work force.

Statement of the Problem

The JOBS program was enacted during a time when the population and work force were projected to grow more slowly than at any time since the 1930s (Johnston & Packer, 1987). Porter (1987) stated that the substantial reductions in the number of people entering the labor force each year would result in a need for additional workers. This demand for workers was expected to increase the chances of state Aid to Families with Dependent Children (AFDC) employment programs being able to assist more of their recipients in obtaining jobs. Therefore, disadvantaged individuals were expected to have a better opportunity to find jobs (Porter, 1987).

It was estimated that 52% of Alabama's adult population had not attained a high school education. A large portion of these were welfare recipients whom the state targeted as possible new entrants into the work force, provided they could acquire the requisite basic skills (State of Alabama Department of Education, 1989). The focus of the JOBS program was on requisite basic skills. State and local JOBS administrators were convinced that a large portion of

welfare recipients could not become self-supporting unless they improve their basic skills (Chisman, 1992).

If members of the welfare population (specifically the Alabama welfare population) were to be made employable by increasing their basic skills level, then it was necessary to understand what factors contributed to this improvement. The Alabama JOBS administrators felt that several factors such as target group membership, referral status, education, age, instructional time, and TABE pretest scores influenced the participants' success in improving their basic skills (Jo Smith, personal communication, June, 1992).

Significance of the Study

Studies conducted in the 1980s provided a strong foundation for legislative action on the national level by showing that welfare-to-work programs produced positive results (Gueron & Pauly, 1991). These studies identified education and training strategies for individuals who participate in work related programs, e.g., more intensive services for those recipients with barriers to employment (Porter, 1990).

Conversely, prior research on the JOBS program focused predominantly on the program rather than the participant. Program administrators of the Alabama JOBS program expressed

a need to measure the characteristics of individuals who came into work related programs. Specifically, they wanted to determine the impact of the variables target group membership, referral status, education, age, instructional time, and Tests of Adult Basic Education (TABE) pretest scores on grade-level advancement in reading, math, and language.

If the impact of participant attributes on grade-level gains could be determined, and the JOBS program further evaluated, then the results of this study might be utilized to provide (a) information about pre- and posttest results, (b) JOBS administrators with information concerning the significance of pre-selected attributes on the participants' program success, (c) information about the general operation of the JOBS program, and (d) a basis for further research regarding individual participants in welfare-to-work programs in Alabama.

Purpose and Objectives

The purpose of the study was twofold: (a) to determine if the instruction correlated to the TABE resulted in the participants' basic skills improvement, and (b) to determine the impact of selected factors on grade-level advancement (pre- versus posttest scores).

Specific objectives of the study were to:

1. Compare pre- and posttest TABE scores to determine the overall level of significance for subject improvement in reading, math, and language. Subject improvement was measured by grade-level advancement.

2. Determine the association between grade-level advancement in reading, math, and language and the independent variables target group membership, referral status, education, age, instructional time, and pretest TABE scores.

3. Determine the significance of the relationship between grade-level advancement in reading, math, and language and the independent variables.

Research Questions

The research questions were:

1. Was there a significant change in pre- and posttest TABE scores for reading, math, and language? A significance level of .05 was used throughout this study.

2. If there was a significant change in scores, was the difference in subject pre- and posttest scores significantly related to the independent variables of target group membership, referral status, education, age, instructional time, and TABE pretest scores? To answer the second research question, three subsequent questions were asked:

2a. What were the bivariate and multiple correlations between grade-level advancement in reading and the independent variables?

2b. What were the bivariate and multiple correlations between grade-level advancement in math and the independent variables?

2c. What were the bivariate and multiple correlations between grade-level advancement in language and the independent variables?

Limitations of Study

Demarcations of the research were listed as:

1. Research results may be applicable only to the state of Alabama due to the flexibility allowed to each state in program design.

2. Sample was limited. Of 812 cases evaluated only 108 were suitable for statistical analysis.

3. Sample selection was too restrictive. The research sample consisted only of those participants who were administered the posttest between October 1991 and September 1992.

4. The research was limited by the use of grade equivalent scores.

5. The study exercised no control over instructors or site preparation.

6. The curriculum administered was not standard. Although the curriculum was consistent, teachers were allowed flexibility with instructional materials.

Definition of Terms

For clarification, the following definitions were used in this study:

1. Adult Basic Education (ABE) programs were designed to assist adults in achieving a basic literacy level and in correcting educational deficiencies (State of Alabama Department of Human Resources, 1990).

2. The participant's age was recorded when she/he entered the JOBS program.

3. The community work experience program, a component of the JOBS program, was designed to improve the employability of individuals not otherwise able to obtain employment. The program provided work experience and training that assisted JOBS participants to move into public or private employment (Department of Health and Human Services, 1989).

4. Education was the last grade that the participant had completed. This information was recorded when the participant entered the JOBS program.

5. Intensive services included basic or long-term education and occupation skill training. Intensive services were intended to improve the JOBS participant's work related skills (Porter, 1990).

6. Instructional time was the period of time between the TABE pre- and posttest. The collection of data on instructional time was from October 1991 through September 1992.

7. On-the-job training (OJT) was operated as a component to JOBS. Under OJT a participant was hired by a private or public employer. While engaged in productive work, the participant received training that provided knowledge or skills essential to job performance. The state entered into a contract with the OJT employer to reimburse the employer for providing training and additional supervision to the participant (Department of Health and Human Services, 1989).

8. Referral status identified the participation as mandatory or voluntary. A voluntary JOBS participant was an individual that had been exempted from participation. Exemptions included inadequate child care, transportation, illness, etc.

9. Target groups were identified as: (a) custodial parents under age 24 with less than a 12th grade education or equivalent, (b) long-term recipients who had received assistance 36 out of the last 60 months, and (c) those not identified by the Alabama JOBS program as a target group.

10. A work supplementation program was operated as a component to the JOBS Program. The state could use AFDC funds to develop and subsidize jobs for AFDC recipients as an alternative to aid (Department of Health and Human Services, 1989).

11. The Work Incentive (WIN) program was a federally required mandate. States were to provide AFDC recipients, considered employable, with a range of services, including job search assistance, on-the-job training, child care, and transportation assistance. Most of the state WIN programs served limited numbers of AFDC recipients (U.S. General Accounting Office, 1991).

II. REVIEW OF LITERATURE

Introduction

This chapter contains a review of the literature that was related to adult literacy and the work force. The information presented will cover (a) a pre-Job Opportunities and Basic Skills (JOBS) program overview, (b) an assessment of skills needed by the labor force, (c) participant attributes and skills development, (d) key principles guiding the development of the JOBS program, (e) a JOBS program overview, and (f) specifically, an Alabama JOBS program overview.

Pre-JOBS Program Overview

Since 1968, the federal government required states to operate Work Incentive (WIN) programs for the recipients of Aid to Families with Dependent Children (AFDC). Most of these programs served limited numbers and types of AFDC recipients, and were not considered effective in providing services to those identified with barriers to employment. Accordingly, they were criticized for serving too few

welfare recipients and focusing on the most employable (U.S. General Accounting Office, 1991).

Although pre-JOBS programs were reprobated, they were used as a basis for developing the JOBS program. Gueron and Pauly (1991) noted several marked characteristics of welfare-to-work programs in the following list:

1. The programs that emphasized immediate job placement, as well as more intensive services, produced sustained increases in employment and earnings for single parents on welfare.

2. In moving women from welfare to work, expectations should be modest. For example, caseload reductions were not extensive, and increases in the participants' standard of living were limited.

3. Mandatory job search for large numbers of people would maximize welfare savings and job-holdings; however, job search alone usually would not get people better paying jobs nor benefit the more disadvantaged.

4. The provision of predominantly higher cost, more intensive services would get people jobs with greater earnings, but would result in lower welfare savings per dollar invested. Furthermore, according to the U.S. Accounting

Office (1991), lower welfare savings were related to the long-term process of self-sufficiency; therefore, cost versus benefit analyses would also need to be viewed over long-term time periods.

In conflict with research findings, a large percentage of the employment programs studied by Manpower Demonstration Research Corporation (MDRC) provided fairly low-cost services. These studies confirmed that low-cost programs were most effective for recipients who were considered to be moderately job ready, and less effective in increasing earnings of those who were identified as least job ready. As anticipated, these programs were least effective for those who were the most job-ready because many of these recipients found employment on their own (Porter, 1990).

However, MDRC studied a few state employment programs that offered intensive services and were successful in increasing employment rates and earnings of the least job-ready recipients. For example, the Baltimore Options program offered more intensive services, including adult basic education, high school equivalency preparation, job skills training, and work experience to AFDC recipients. An evaluation of the Baltimore Options program resulted in higher employment rates and greater earnings for

participating AFDC recipients when compared to those who participated in less intensive programs that consisted primarily of job search assistance (Porter, 1990).

An Assessment of Skills Needed by the Labor Force

Programs offering intensive services were more focused on improving the participants' work related skills. Many of these programs emphasized basic skill development (Porter, 1990).

In a study by Carnevale, Gainer, and Meltzer (1988), the competency of knowing how to learn was identified as the most important basic skill for employees. It was the key that unlocked an individual's future academic, as well as economic success. With this skill, an individual could achieve competency in other workplace skills. Without this skill, learning would not be as rapid, efficient, or comprehensive (Carnevale, Gainer, & Meltzer 1988).

In addition, knowing how to learn involved possessing and/or acquiring the knowledge and skill to learn effectively in any learning situation encountered (Smith, 1987). This essential skill could be based on three factors, i.e., learner needs, learning style, and training. Specifically, learner needs identified what a person needed to know and apply for success in learning. Learning style

was a person's individualized preferences and tendencies that influenced learning. The last factor, training, encompassed a structured activity or instruction that increased a person's competence in learning (Carnevale, Gainer, & Meltzer, 1990).

The initial activity in a sequenced design to teach someone the skill of how to learn would be to assess how an individual best absorbed information. Identification of sensory preferences (visual, auditory, and tactile) through testing would determine the best learning mode for each individual. The identified preferences would then be integrated into educational instruction which would aid the individual in learning how to learn (Carnevale, Gainer, & Meltzer, 1988).

Knowing how to learn has become an essential skill in the workplace. As technology created shifts in job market demand and content, an employee's ability to adapt to company needs through upgrading skills and retraining programs was crucial. Productivity, innovation, and competitiveness all depend on the learning capabilities of the work force (Carnevale, Gainer, & Meltzer, 1988).

Furthermore, machinery and processes could be exchanged or transferred from company to company and country to

country, but the application of human resources to technology and systems was projected to provide America with the coveted competitive edge (Carnevale, Gainer, & Meltzer, 1988). The human resource factor in the workplace has been becoming a scarce commodity, therefore adding value to its availability. This value on human resources was disseminated to areas within American society that in the past have been ignored and mollified with minimal assistance. Government and industry have begun to take a second look at segments of society that had previously been bypassed in the workplace (e.g., older workers, women, minorities, and immigrants), many of whom were economically disadvantaged, academically disadvantaged, or both (Porter, 1990).

In support of the increased value placed on human resources, the JOBS program, mandated by the Family Support Act of 1988, was created. The administrators of the JOBS program did not presume it to be a "cure all" for the projected ill-prepared work force of the year 2000; however, the program was designed to assist a potential source of new entrants into the work force, i.e., women on welfare (Porter, 1990).

A study by Carnevale, Gainer, and Meltzer (1988) concluded "A work force with sound basic skills will strengthen its employer's ability to compete. And for the individual worker, basic skills are the keys to greater opportunity and a better quality of life..." (p. 5). Thereby, the upgrading of work related basic skills included remedial work in basic skills associated with formal schooling in subject areas such as reading, writing and math. These academic skills were deemed necessary to participate in the work force and were fundamental in acquiring other workplace skills. Specifically, other workplace skills included (a) communication skills, (b) problem-solving abilities and creative thinking, (c) interpersonal skills and the ability to work with others, and (d) leadership ability (Carnevale, Gainer, & Meltzer, 1988).

Moreover, employers could not compete successfully without a work force that had attained basic academic skills (Carnevale, Gainer, & Meltzer, 1988). In response to the expressed need for sound academic employee skills, the JOBS program emphasized basic skill development in preparing welfare recipients for employability (Porter, 1990).

Participant Attributes and Skills Development

Several attributes of welfare-to-work program participants were thought to be significant factors in the successful upgrading of basic skills. These attributes included the participants' (a) target group membership, (b) referral status, (c) education, (d) age, (e) hours of instruction, and (f) pretest Tests of Adult Basic Education (TABE) scores (Jo Smith, personal communication, June, 1992).

Target group membership included those individuals identified as long-term, or potential long-term recipients. Long-term recipients were identified as those individuals who had been on assistance 36 out of the last 60 months. Potential long-term recipients were custodial parents under the age of 24 with less than a 12th grade education or equivalent (State of Alabama Department of Human Resources, 1989).

Several characteristics of welfare recipients were investigated. For instance, research found age and low levels of education to be associated with long-term welfare receipt (Bane & Ellwood, 1983; O'Neill et al., 1984; Ellwood, 1986; Maynard et al., 1986). Research also identified young women who had never been married and who began to receive assistance when their child was less than

three years old as potential long-term recipients (Ellwood, 1986).

Referral status identified mandatory versus voluntary participation. Past research did not provide conclusive data on which status was more effective in welfare-to-work programs (Gueron & Pauly, 1991). However, theory supported both positions. For example, mandatory programs would have a greater impact than voluntary ones because they reached people who could benefit but would not participate on their own, and these programs reached more people. Conversely, other theories claimed that voluntary programs would be more successful because they enrolled people who were predisposed to take advantage of program services and attended activities more regularly .

Regardless of whether a program was mandatory or voluntary, deficient hours of instruction had historically been a major problem for welfare education programs (Pauly, Long, & Martinson, 1992). This issue prompted Congress to establish the 20-hour participation standard which allowed for an individual to meet the standard if she attended at least 75% of the scheduled hours for the month. The

effectiveness of the JOBS program was projected to reduce dependency if individual participants attended instructional activities on a regular basis (Department of Health and Human Services, 1989).

In addition, other welfare participant characteristics were identified through research. In educational situations, Pauly, Long, and Martinson (1992) reported that these individuals were found to have more personal, health, child care, and transportation problems than other students. Furthermore, these individuals tended to have low self-esteem, and many required extensive counseling, such as additional guidance, support and assistance to deal with motivational and situational problems before enrolling in class.

Goal, Objectives, and Key Principles

The primary goal of JOBS was to decrease welfare dependence while simultaneously increasing self-sufficiency. This goal was to be achieved by the objectives of providing education and employment. If successfully met, these objectives were expected to result in more stable, productive, and secure family units (Department of Health and Human Services, 1989).

To aid the attainment of the goal of decreasing welfare dependence and the objectives of helping to secure family units, several salient principles guided the development of JOBS. These principles included the following (Department of Health and Human Services, 1989):

1. Parents have the primary responsibility for the support and welfare of their children, and federally funded programs should be designed to assist parents in meeting these responsibilities.

2. Women and their children account for a large percentage of the AFDC recipients. Many of these women were never married, did not complete high school, and had their first child at a young age; therefore, these women needed assistance.

3. An important element of individual responsibility was choice, and parents were to be given a wide range of options, such as child care, while participating in a JOBS program.

4. Education was identified as one of the most important tools an individual needed to achieve full citizenship and independence.

5. Skill training was also recognized as an important element in an individual's endeavor in reaching self-sufficiency.

6. Programs were to be designed to prepare participants for employment in jobs they could realistically be expected to obtain.

7. Resources were to be maximized through the coordination of existing programs at all levels of government, community-based volunteer, and business organizations.

Although there were objectives and key principles established to guide the development of the JOBS program, states were given maximum flexibility in the design of program components. This flexibility allowed each state program to meet local literacy needs. The minimum basic literacy level established by the federal government was 8.9, but states were strongly urged to adopt a definition for basic literacy level. Thereby, the state level would aid in fulfilling the aim of JOBS to reduce welfare dependency and promote self-sufficiency endemic to the region (Department of Health and Human Services, 1989).

In addition, state JOBS programs were to provide educational activities. These activities were (a) high school education or general educational development (GED)

preparation, (b) basic and remedial education, and (c) education in English as a second language (ESL). Also included were (a) job readiness training, including pre-employment training in job skills, (b) technical job skills training, and (c) job development and placement. These programs would offer at least two of the following: (a) group and individual job search, (b) on-the-job training (OJT), (c) work supplementation, and (d) community work experience (Figueroa, 1989).

Moreover, program administrators were to determine the allocation of resources. They would encounter three potential responses to resource allocation, regardless of budget size. These options were to offer a program that emphasized low-cost services (primarily job search) for a large portion of the caseload, operated more intensive components and case management on a more narrowly defined group, or offered a combination of options. Legislation supported and directed states towards the latter option which was a mixed strategy (Gueron & Pauly, 1991).

A National JOBS Program Overview

The JOBS program combined elements of previous federal welfare-to-work programs into a single, more comprehensive package. Legislation advocated for states to address some

of the weaknesses of prior programs. For example, states were encouraged to serve a larger percentage of their AFDC recipients and to target their resources to those with employment barriers. This encouragement was strengthened by a financial penalty that reduced the federal share of funding available to a state if it failed to serve and spend at least 55 percent of its total JOBS funds on individuals identified as long-term or potential long-term AFDC recipients (U.S. General Accounting Office, 1991).

Furthermore, 90% of all AFDC recipients were women; therefore, JOBS was primarily an effort to assist poor women with qualifying for and securing employment that would take them off welfare permanently (Education Writers Association, 1991). In efforts to assist these women, the base of AFDC recipients required to participate was expanded (U.S. General Accounting Office, 1991). Research estimated that previous programs exempted from 53 to 91% of adult female AFDC recipients from participation requirements. Contrastingly, 31 to 65% of female recipients were exempted under the JOBS program (Childs Trends, Inc., 1989). This decrease in exemptions was due, in part, to the mandatory participation requirement for single parents with children at least three years of age, for teen parents with children of any

age, and for nonparent teens age 16-18 who were not in school (Burghardt, 1990).

Besides the increase in mandatory participation, the range of services provided was broadened (U.S. General Accounting Office, 1991). To support this widened range of services, federal funding of one billion was allocated annually to the states -- to be partially matched by state funds (Burghardt, 1990); therefore, program cost was an important factor in program design. State administrators found they generally received a quality program that produced positive results when offering more intensive services to those who were least job ready. However, these programs were more expensive per participant than those concentrating on job search and providing only minimal education services. (Porter, 1990).

The emphasis on intensive services, which in essence was the upgrading of basic skills, was the branching factor for JOBS versus pre-JOBS programs (Appendix A). Therefore, the Department of Health and Human Services emphasized the importance of educational activities for AFDC recipients with basic skills deficiencies. The Department also advocated for training to help these individuals secure

employment (U.S. General Accounting Office, 1991). The strong emphasis on education was supported by the requirement that participants who lacked a high school diploma or its equivalent had to participate in some form of education or training (Ganzglass, 1990).

An Alabama JOBS Program Overview

The JOBS program, which was implemented April 1, 1990, was a statewide plan that acknowledged the high rate of illiteracy among its welfare population. The state defined the basic literacy level at grade 8.9. This level was to be a standard, but service providers were instructed to determine the basic literacy level endemic to their particular area (State of Alabama Department of Human Resources, 1992).

In response to the problem of functional illiteracy within the state, program goals were formulated. These included the (a) coordination of a comprehensive training and skills development program for AFDC recipients, (b) provision of educational opportunities which would enable recipients to acquire the basic skills required in the modern workplace, (c) provision of necessary support services to recipients, and (d) assurance of real opportunities for job placements and career development (State of Alabama Department of Human Resources, 1992).

The state placed an added emphasis on assisting those who were identified as long-term or potential long-term recipients, to avoid a federal funding penalty. These individuals included (a) parents under 24 years of age who had not completed high school or who had little or no work experience, (b) individuals who had received AFDC for 36 of the last 60 months, and (c) individuals in families who were within two years of losing assistance. These were families where the youngest child was 16 or 17 years of age (State of Alabama Department of Human Resources, 1990).

The emphasis on assisting long-term recipients resulted in a variety of education and training services. A case manager was assigned to help the participant and her/his family obtain services needed to assure effective participation. For example, the case manager assisted the client in establishing a career plan, provided assistance in arranging child care and other supportive services, identified service providers, and arranged for client participation in appropriate JOBS activities. After program placement, the case manager monitored participation, made referrals, and provided other necessary services for the client prior to employment (State of Alabama Department of Human Resources, 1992).

The JOBS program offered an array of services to its participants. These services included the following (State of Alabama Department of Human Resources, 1990):

1. The participants were assessed in the areas of skill, work experience, potential barriers to participation, and education.

2. An individual career plan was developed which listed employment goals and needed services.

3. Educational activities included General Educational Development (GED) preparation, basic education, and English as a second language classes.

4. Job skills training was provided through vocational schools, technical schools, and the Job Training Partnership Act (JTPA) -- a federal legislation that provides job training for low income/disadvantaged individuals.

5. Job readiness activities were offered for participants to become familiar with general workplace expectations.

6. The Department of Human Resources and other agencies offered job development and placement activities. These activities located potential jobs and secured interviews for the participants.

7. Preparation for Employment Program, or PREP, provided actual work experience for participants.

8. Job search offerings enabled participants to secure permanent employment by using job seeking skills they had learned.

9. Supportive services, primarily child care and transportation, enabled individuals to participate in scheduled activities.

Because the Alabama JOBS program was mandatory, sanctions were enforced which led to the clarification of several program exemptions. For example, the minimum standards for work that qualified an individual for an exemption included working 30 or more hours per week, and earning at least minimum wage. An exemption was also provided for the custodial parent age 18 or 19, without a high school diploma. This exemption was based on the failure of the custodial parent to make good progress after returning to high school to obtain a diploma or GED certificate. Moreover, an exemption was available for the custodial parent who cared for a child under three years of age (State of Alabama Department of Human Resources, 1992).

If an exemption was not applicable, and the AFDC recipient failed to comply without good cause (e.g., the

individual failed to participate or refused to accept employment), the following sanctions were imposed (Department of Health and Human Services, 1989):

1. The state would not take into account the individual's needs in determining the family's need for assistance and the amount of payment.

2. If the individual was a parent whose family was eligible, the state would not take into account the needs of the second parent in determining the family's need for assistance and the amount of payment unless the second parent was participating in the JOBS program.

3. If the individual was the only dependent child, the state would not take into account the individual's needs in determining the family's needs for assistance and the amount of payment.

4. If such individual was a parent or other caretaker relative, payments for the remaining members of the assistance unit would be in the form of protective or vendor payments.

However, good cause for failure to participate in the program or refusal to accept employment would be found if (State of Alabama Department of Human Resources, 1992):

1. Child care was unavailable or inadequate.

2. The employment would result in the family of the participant experiencing a net loss of cash income.

3. The individual became ill, or another family member required the presence of the individual.

4. Transportation problems involved a breakdown or disruption in transportation arrangements with no ready access to alternate transportation.

5. Conflicting demands evolved including individuals who missed appointments or failed to attend a component activity because of job interviews, court appearances, temporary incarceration, or employment during the time the activity occurs. Good cause also included individuals for whom participation in an activity resulted in the loss of a job.

6. The activity became unavailable or inappropriate.

7. The employment, offer of employment, or JOBS activity discriminated in terms of age, sex, race, religion, ethnic origin, or physical or mental handicap.

In the event of a dispute involving an individual's participation, a conciliation process would be initiated. At this time the participant's rights and responsibilities

under the program would be clearly explained and consequences of continued failure to participate would be communicated. Conciliation would be considered successful if the participant (a) agreed to resume the activities originally agreed upon, (b) presented information that established good cause for the lack of participation, the individual acquired an exempt status, or (c) made revisions in the required activities or support services provided (State of Alabama Department of Human Resources, 1992).

III. METHODOLOGY

Introduction

The methods utilized in this study were selected to achieve the most accurate data under existing circumstances. These methods were explained under the headings (a) Sample Selection, (b) Instrumentation, (c) Research Design, (d) Data Collection, and (e) Statistical Treatment of Data.

Sample Selection

Data were collected on 812 participants in the Alabama Job Opportunities and Basic Skills (JOBS) program. All of these participants were pre-tested prior to September 1992. One hundred and eight of the 812 participants were included in the sample. These individuals were selected because (a) they met the research time specifications, (b) they were post-tested on the Tests of Adult Basic Education (TABE), and (c) the database contained complete data on them. Although not randomly selected, the subjects represented a broad sample of the population enrolled in the Alabama JOBS program.

The data for this study were collected from October 1991 through September 1992. A minimum instruction time for each person in the sample was one quarter.

Sample Description

The research sample consisted of 108 women who were Aid to Families with Dependent Children (AFDC) recipients. Most of these women had a mandatory status; thus, they were not exempted from participation in the JOBS program. In addition, 70.6% of the sample were long-term or projected long-term recipients. The average age of the participant was 31, and 84.3% of the sample had educational backgrounds within the grade range of 8 to 11. Educational backgrounds referred to the last grade completed.

Instrumentation

The Tests of Adult Basic Education (TABE) was used in this study. The instrument consisted of seven sections with a total of 263 multiple-choice items. These items were structured to reflect language and content appropriate for adults. The TABE was designed to measure the understanding and application of principles rather than specific knowledge or recall of facts (Roberson, 1987).

Instrument Design

The seven sections of the TABE were vocabulary, reading, comprehension, language mechanics, language expression, math calculation, spelling, and math concepts (Roberson, 1987). However, because Alabama did not use the spelling section, for purposes of this study the spelling section was excluded.

The TABE content classifications were derived from adult education curriculum guides, published texts, and instructional programs. The following list specifies item coverage (Roberson, 1987):

1. The vocabulary test contained 30 items that measured same-meaning words, opposite-meaning words, multi-meaning words, the meaning of affixes, and words in content.

2. The comprehension test included 40 items that measured comprehension of reading passages. These items tested the ability to extract details, analyze characters, identify main ideas, and interpret events narrated in the passages.

3. The math computation test encompassed 48 items that measured understanding of the operations of addition, subtraction, multiplication, and division.

4. The math concepts and applications test contained 40 items that measured understanding of math concepts, i.e., numeration, number sentences, number theory, problem solving, measurement, and geometry.

5. The language mechanics test had 30 items that measured skills in the mechanics of capitalization and punctuation. Editing skills were measured in the context of passages presented in various formats.

6. The language expression test included 45 items that measured skills in language usage and sentence structure. The items measured skills in the use of various parts of speech, formation and organization of sentences and paragraphs, and writing for clarity.

7. The spelling test contained 30 items that measured applications of spelling rules for consonants, vowels, and various structural forms.

The TABE encompassed four overlapping levels and two parallel forms, Forms 5 and 6. The four levels made it possible for participants to be tested within the level most suited to their abilities. Forms 5 and 6 were used to pre- and posttest, respectively.

Shown in Table 1 are four levels of TABE and the estimated grade ranges. The advanced level had been

recently added to provide for material usually taught in high school. This addition should be helpful to participants who are planning to take the GED tests (Roberson, 1987).

Table 1

TABE Grade Range

Level	Range
E (Easy)	2.6 - 4.9
M (Medium)	4.6 - 6.9
D (Difficult)	6.6 - 8.9
A (Advanced)	8.6 - 12.9

The TABE could be administered individually or to groups. Additionally, it had a time limit for each section, and the total time allowed for all seven sections was 3.3 hours (Jackson, 1990).

Validity and Reliability

Research validity for the use of TABE was supported by the tests design which measured a broad, common base of basic educational skills (Roberson, 1987). Because the

Alabama JOBS program was analyzed by its effect on upgrading adult basic skills, the gain achieved by TABE was assumed valid in this study. As with any instrument, reliability was considered an important factor in the research. The reliability reported for the TABE pre- and posttest was .80 to .90 according to the Kuder-Richardson estimates of reliability (Jackson, 1990).

Research Design

This study was an ex post facto design. The independent variables were target group membership, referral status, education, age, instructional time, and the Tests of Adult Basic Education (TABE) pretest scores. Grade-level advancement in reading, math, and language were the dependent variables.

The study was designed to determine if a significant difference existed between pre- and posttest TABE scores in the subject areas. In addition, the effects of the independent variables on the dependent variable grade-level advancement in each of the three subject areas were to be determined.

Data Collection

The data were collected from October 1991 through September 1992. Prior to that time, the administration of TABE was not a standard practice across the state.

A standard WATS (Work and Training Services Computer System) participation report was used to collect demographic data. Data collected from these reports included target group membership, referral status, education, and age.

The TABE was used to pre- and posttest the sample. A pretest was administered at the time of entry into the program. In response to the pretest results, a course of study was designed to correct basic educational weaknesses. After six months of instruction the participant was given a posttest. The pre- and posttest scores were collected from a computer printout that was identified by JOBS site. The scores were collected as grade equivalent scores. These scores indicated achievement levels related to those found in common educational institutions such as elementary and secondary schools. Grade equivalent scores served as reference points for adult learners and facilitated the organization of instructional materials. The scale for grade equivalent ranged from .0 through 12.9, thus representing 13 years of school, i.e., grades K through 12. The

grade equivalent represented the grade and month of school (Tests of Adult Basic Education, 1987). As the grade equivalent score changed, this study identified the change as grade-level advancement.

Instructional time was collected by weekly attendance reports provided by 27 JOBS sites (Appendix B). The collection process covered a 52 week period. Within this time span, sample subjects had a minimum instruction time of 12 weeks, or one quarter.

Statistical Treatment of Data

Research data were collected and entered into the research database using Excel for windows, 1991 version. Data were later translated into a symbolic format for statistical analysis using SPSS/PC+4.0.1.

The frequency distributions of the independent variables target group membership, referral status, education, age, instructional time, and pretest TABE scores were calculated. These frequencies were used to ascertain sample characteristics.

The research questions were addressed by the following statistical procedures:

1. Was there a significant change in pre- and posttest TABE scores for reading, math, and language? The level of

significance was $p \leq .05$. Statistical procedure included a multivariate analysis of variance (MANOVA) to evaluate the significance of difference between groups (i.e., pre- versus posttest).

2. If there was a significant change in scores, was the difference in subject pre- and posttest scores significantly related to the independent variables of target group membership, referral status, education, age, instructional time, and TABE pretest scores? To answer this research question, three subsequent questions were asked:

2a. What were the bivariate and multiple correlations between grade-level advancement in reading and the independent variables? Statistical treatment included a Pearson correlation coefficient to measure the association between reading improvement and each of the independent variables, and a multiple regression to determine the significance of the relationship between reading and the independent variables. Variables were entered into the multiple regression equation by the stepwise method.

2b. What were the bivariate and multiple correlations between grade-level advancement in math and the

independent variables? Statistical treatment included a Pearson correlation coefficient to measure the association between math improvement and each of the independent variables, and a multiple regression to determine the significance of the relationship between math and the independent variables. Variables were entered into the multiple regression equation by the stepwise method.

2c. What were the bivariate and multiple correlations between grade-level advancement in language and the independent variables? Statistical treatment included a Pearson correlation coefficient to measure the association between language improvement and each of the independent variables, and a multiple regression to determine the significance of the relationship between language and the independent variables. Variables were entered into the multiple regression equation by the listwise and stepwise method. This combination of data entry was utilized to accommodate the categorical variable target group membership.

IV. RESULTS AND DISCUSSION

Introduction

The results of the study were presented in this chapter. These results were reported under the headings (a) Descriptive Statistics, (b) Statistical Significance Between Groups, (c) Association Between Grade-Level Advancement in Reading, Math, and Language and the Independent Variables, (d) Significance of the Relationship Between Grade-Level Advancement in Reading and the Independent Variables, (e) Significance of the Relationship Between Grade-Level Advancement in Math and the Independent Variables, and (f) Significance of the Relationship Between Grade-Level Advancement in Language and the Independent Variables.

The primary purpose of this research was to determine if the basic skills level of the Job Opportunities and Basic Skills (JOBS) participants increased after instruction. Specifically, this study investigated if (a) a significant difference existed between the Tests of Adult Basic Education (TABE) pre- and posttest scores, and (b) the

differences in subject pre- and posttest scores were significantly related to the independent variables target group membership, referral status, education, age, instructional time, and pretest TABE scores.

Descriptive Statistics

The sample included 108 JOBS participants from 27 counties in Alabama. Because these participants were all female, the results of this research were characteristic of a female population receiving public assistance in Alabama.

Descriptive data in Table 2 concerning target group membership indicated that the majority (67.6%) of the participants were in Group 1 (i.e., long-term welfare recipients who had received assistance 36 out of the last 60 months). Another group of potential long-term recipients were those identified in Group 2 (i.e., custodial parents under the age of 24, and less than a 12th grade education or equivalent). Together these two groups accounted for 79.6% of the sample. Participants in Group 3 were not identified as a target group in the Alabama JOBS program. The majority (80.8%) of the participants who were clustered in the mandatory participation category as shown in Table 2 were

also identified as long-term and potential long-term recipients, i.e., Group 1 and Group 2.

Table 2

A Summary of Participation by Target Group Membership and Referral Status

Group	Mandatory Frequency (%)	Voluntary Frequency (%)	Total Frequency (%)
Group 1	70 (70.7)	3 (33.3)	73 (67.6)
Group 2	10 (10.1)	3 (33.3)	13 (12.0)
Group 3	19 (19.2)	3 (33.4)	22 (20.4)
Total	99 (100.0)	9 (100.0)	108 (100.0)

Participation by educational level was depicted in Table 3. The educational attainment of the participants had a mean of 9.8, mode of 11, and median of 10. The two levels with the highest number of participants were in the 8th and 9th grade level and the 10th and 11th grade level. Participation rates were $\underline{n}$=33 (30.6%) and $\underline{n}$=58 (53.7%), respectively. Therefore, participants coming into the JOBS program with an educational background within the range of grades 8 to 11 appeared to remain in the program at least long enough to be administered the posttest.

Table 3

A Summary of Participation by Educational Level
(Last Grade Completed)

Education	Frequency	Percentage
6th - 7th grade	9	8.3
8th - 9th grade	33	30.6
10th - 11th grade	58	53.7
12th grade and beyond	8	7.4
Total	108	100.0

A summary of participants by TABE pretest scores is shown in Table 4. These statistics resulted in a group mean of 5.9, median of 5.5, and mode of 4.7. Furthermore, the grade range of 4 to 6 was accounted for by 61 participants, or 56.5% of the sample. There was a noticeable dispersion between the average TABE pretest grade level of 5.9 and the average educational level of 9.8.

Table 4

A Summary of Participants by TABE Pretest Grade Level

Grade Level	Frequency	Percentage
1-3	21	19.4
4-6	61	56.5
7-9	24	22.2
10+	2	1.9
Total	108	100.0

Participation by age is shown in Table 5. The mean, median, and mode were age 31. The participation rate was n=69 (63.9%). The two age ranges with the lowest number of participation were 17-23 and 45+. Participation rates for these two extremes were n=17 (15.7%) and n=4 (3.6%), respectively.

Table 5

A Summary of Participation by Age

Age Category	Frequency	Percentage
17-23	17	15.7
24-30	28	25.9
31-37	41	38.0
38-44	18	16.8
45+	4	3.6
Total	108	100.0

Frequencies for instructional time resulted in a mean and median of 14 hours per week, and a mode of 10 hours. The majority (n=79 [73.2%]) of the participants received an average of 12 to 17 hours of instruction each week. A dissection of this variable is shown in Table 6. According to this data, it appeared that the majority of the sample participants were willing to tolerate an instructional time of 12 to 17 hours per week.

Table 6

A Summary of Participation by Instruction Time

Average Hours (Weekly Instruction)	Frequency	Percentage
6-7	3	2.8
8-9	7	6.5
10-11	14	12.9
12-13	24	22.2
14-15	28	26.0
16-17	27	25.0
18+	5	4.6
Total	108	100.0

Statistical Significance Between Groups

A multivariate analysis of variance (MANOVA) was used to assess the statistical significance of differences between groups, i.e., TABE pre- and posttest scores in reading, math, and language. The test for the overall significance in the MANOVA was Wilks' lambda (Table 7). A value of .52 implied a significant difference between groups at the $\rho \leq .000$. The results of the MANOVA are listed in Table 8. The differences between pre- and posttest TABE scores for the three subject areas were significant. This

significance was indicative of a consistent increase in scores after the participants were exposed to instruction.

Table 7

Wilks' Lambda - A Test for Overall Significance

Test	DF	Value	Approximate F	Significance
Wilks' lambda	3	.52	32.74	.000

Table 8

MANOVA Statistical Significance Between Groups

Subject Area	DF	F-Value	Significance
Reading	1,107	62.29	.000
Math	1,107	41.25	.000
Language	1,107	18.66	.000

Association Between Grade-Level Advancement in Reading, Math, and Language and the Independent Variables

The bivariate, or Pearson, correlation between independent variables and subject areas are listed in Table 9. Three correlations were found significant. These were (a) target group membership and language, (b) referral status and language, and (c) instructional time and math.

The correlation between target group membership and language was .32 at .001 level of significance. A Pearson correlation was also found significant between referral status and language; however, this association was determined insignificant by a multiple regression analysis. The last significant correlation shown in Table 9 was between instructional time and language. This correlation was .31 at .001 level of significance.

Table 9

Pearson Correlations Between Subject Pre- and Posttest TABE Scores and the Independent Variables

Correlation	Pre- Versus Posttest TABE Scores		
	Reading	Math	Language
Target Group	.12	.11	.32**
Referral Status	.02	-.01	-.23*
Education	.00	-.18	-.03
Age	-.01	.00	-.18
Instructional Time	-.06	.31**	.02
Pretest TABE scores	.02	-.08	-.10

*$\rho \leq .01$; **$\rho \leq .001$

The Pearson correlation between target group membership and language of .32 was investigated further due to the variable's categorical nature. Specifically, this was a

categorical variable with three distinct groups. These groups were classified as (a) long-term recipients who had received assistance 36 out of the last 60 months, (b) custodial parents under the age of 24 without a 12th grade education, and (c) those participants not identified by group membership in the Alabama JOBS program.

The variable group means are shown in Table 10. The greatest average change in pre- versus posttest TABE scores was found in group 1.

In addition, the tests of significant differences between means are listed in Table 11. Significant differences were found between the means for group 1 and group 2 and group 1 and group 3. The F-values were 16.78 and 18.03, respectively.

Table 10

Target Group Membership
Group Means (Language)

Identification of Groups	Mean Differences Pre- Versus Posttest Scores	Average Change in Group Mean from the Grand Mean
Group 1 Long-term recipients, assistance 36 out of the last 60 months	.40	+1.26
Group 2 Custodial parents under age 24, less than 12th grade education or equivalent	1.97	- .31
Group 3 Not identified as a target group in the Alabama JOBS program	1.58	+.08

Table 11

Target Group Membership
Significance Between Group Means (Language)

Group Differences	DF	F-Value
Group 1 versus group 2	1	16.78*
Group 1 versus group 3	1	18.03*
Group 2 versus group 3	1	.34

$p \leq .01$

Significance of the Relationship Between Grade-Level Advancement in Reading and the Independent Variables

A multiple regression analysis failed to reveal a significant relationship between the independent variables and the dependent variable grade-level advancement in reading. The established criteria was .05 level of significance.

Although the data entry method was stepwise no variables were entered or removed. The result of this analysis indicated that the selected independent variables did not have a influence on grade-level advancement in reading.

Significance of the Relationship Between Grade-Level Advancement in Math and the Independent Variables

A multiple regression analysis of the relationship between the independent variables and math was successful in identifying a significant relationship. The data entry method was stepwise and the only variable entered into the equation was instructional time. The established criteria was .05 level of significance.

The analysis resulted in the identification of instructional time as a significant factor in grade-level advancement (Table 12). Specifically, the amount of

instructional time a participant received was predicted to influence her ability to progress in math.

Table 12

Multiple Regression - Math

Variable	DF	F-Value	Significance
Instructional time	1,106	11.37	.001

$\rho \leq .05$; $R^2 = 10\%$

Significance of the Relationship Between Grade-Level Advancement in Language and the Independent Variables

A multiple regression between the independent variable target group membership and language resulted in a significant relationship (Table 13). This categorical variable, target group membership, was appropriately entered into the multiple regression equation. The method of data entry was listwise for the categorical variable and stepwise thereafter.

According to the data in Table 13 group membership had a significant influence on grade-level advancement in language. Specifically, the data indicated that progress in language could be predicted by the group a participant belonged to.

Table 13

Multiple Regression - Language

Variable	DF	F-Value	Significance
Target Group	2	5.82	.004

$\rho \leq .05$; R^2 = 10%

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The low level of education among Alabama's welfare recipients and the effectiveness of the Job Opportunities and Basic Skills (JOBS) program were examined in this study. Specifically, factors that influenced educational gains were evaluated. These factors included target group membership, referral status, education, age, instructional time, and pretest scores on the Tests of Adult Basic Education (TABE). The specific topics included in the following narrative were (a) the purpose of the study, (b) a summary of the findings, (c) conclusions, and (d) suggestions for further study on the JOBS program and its participants.

Purpose and Objectives of the Research

The purpose of the study was to determine (a) if the instruction correlated to the TABE resulted in the participants' basic skills improvement, and (b) the impact of selected factors on grade-level advancement.

The proposed objectives were to:

1. Compare pre- and posttest TABE scores to determine the overall level of significance for subject improvement in reading, math, and language. Subject improvement was measured by grade-level advancement.

2. Determine the association between grade-level advancement in reading, math, and language and the independent variables.

3. Determine the significance of the relationship between grade-level advancement in reading, math, and language and the independent variables.

Summary of Findings

The majority (70.7%) of the sample were long-term recipients who had been on assistance 36 out of the last 60 months, and were classified as mandatory participants. Gender was not a factor in the analysis because all of the participants were female; thus, it appeared that this study was characteristic of a female population who received public assistance. Also, the average participant age was 31.

Other studies had confirmed an individual's educational level to be an important predictor of the likely duration of welfare receipt (Bane & Ellwood, 1983; O'Neille et al.,

1984; Ellwood, 1986; Maynard et al., 1986). Therefore, this study used two variables pertaining to the participants' educational level. These variables included educational level (last grade completed) and TABE pretest scores. Neither of the two variables revealed a significant relationship with the dependent variables grade-level advancement in reading, math, or language.

The first research question asked if there was a significant change between pre- and posttest TABE scores for reading, math, and language. The multivariate analysis of variance (MANOVA) confirmed that there was a significant difference among subject pre- and posttest scores.

Significant associations between three of the independent variables and grade-level advancement were determined by the bivariate, or Pearson correlation. These three associations included (a) target group membership and language, (b) referral status and language, and (c) instructional time and math.

However, the multiple regression analyses identified only two of the independent variables with significant relationships to grade-level advancement. These variables were instructional time and target group membership.

Target group membership was a categorical variable with three distinct levels. These levels were identified in the following list:

1. Group 1 consisted of long-term recipients who had been on assistance for 36 out of the last 60 months.

2. Group 2 included custodial parents under the age of 24 with less than a 12th grade education.

3. Group 3 contained those participants who were not identified within a specified group by the Alabama JOBS program.

The means between Group 1 and Groups 2 and 3 were significantly different. In addition, Group 1 had the largest average change in group mean when compared to the grand mean. Participants in this group achieved greater gains in posttest scores than those in Group 2 and Group 3.

Conclusions

The conclusions drawn from this study answered specific questions related to the Alabama JOBS program. Specifically, these questions were if (a) the difference between the TABE pre- and posttest was significant, and (b) the relationships between the independent variables and grade-level advancement in reading, math, and language were significant.

The difference in the TABE pre- and posttest scores was significant ($\rho \leq .05$) in all subject areas. Therefore, it appeared that exposure to the instruction provided for the participants during the six-month interval between the pre- and posttest resulted in subject improvement.

A bivariate and multiple regression analysis identified a significant relationship between instructional time and grade-level advancement in math. Thereby, instructional time was recognized as a predictor of the JOBS participants' progress in math.

Group membership was determined to be a predictor of grade-level advancement in language. In addition, it was found that the mean of participants in Group 1 was significantly different from the mean of those belonging to Groups 2 and 3. This difference could be the result of the gain score dependency on pretest scores. Specifically, participants who initially scored low achieved larger gains. The research results did not reveal significant relationships between gains achieved in reading, math, and language and the other independent variables. There were two plausible reasons for the failure to detect other significant relationships. These reasons included the following:

1. The model could be faulty. The independent variables thought to be a factor in the participants' success in grade-level gains were not highly influential at .05 level of significance. Therefore, this study failed to identify significant relationships between other variables and grade-level advancement in reading, math, and language.

2. The use of change scores in lieu of raw scores might not be a reliable measure since there tends to be the undesirable property of gain dependence on the pretest scores. Participants who initially scored low would have larger gains than those who initially scored high (Cohen & Cohen, 1983). If the dependent variable, grade-level advancement, was unreliable the independent variables could have a direct effect on pre- and posttest scores even though the statistical model showed an insignificant relationship.

Besides the two items above, there appeared to be a disadvantage in using TABE as an instrument of measure. Although this instrument was designed specifically for adults, the test items were reported as being distinctly middle class and academic in orientation. Moreover, only a modest portion of the items were about everyday events of low-income adults' lives (Jackson, 1990). Therefore, it was concluded that TABE might not be an appropriate instrument

of measure for a large portion of the JOBS participants. This conclusion is supported by the Alabama JOBS participants' (a) program dropout rate, i.e., 81.77% of the 812 JOBS participants evaluated dropped out of the program before the first six-month assessment, (b) low-income status of JOBS participants, and (c) average pretest reading score of grade 6. This pretest reading score was applicable to the 812 participants evaluated at the beginning of the research.

Suggestions for Further Study

If this study were to be replicated the following suggestions are offered:

1. Develop a feedback mechanism for reporting raw scores in lieu of grade equivalent scores.

2. Expand the number of participants in the sample data base.

3. Develop a reporting system for those participants who dropped out of the program. Specifically, the report should include reasons for dropping out.

4. Extend data base to include ethnic background and the number of family members per household.

Recommendations for further research included the following:

1. An investigation of those individuals who dropped out before the first posttest should be undertaken. Reasons for program exit should be determined.

2. The significance of a relationship between affective measures and subject improvement should be evaluated. Some of the instruments that measure affective attributes are listed in Appendix C.

3. Additional research on the JOBS program should investigate the use of the Tests of Adult Basic Education (TABE) as a suitable instrument of measure for JOBS participants.

4. Research should be undertaken that compares the use of TABE and its related curricula with other methods of testing and instruction, e.g., TABE versus Comprehensive Adult Student Assessment System (CASAS).

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APPENDICES

APPENDIX A

MAJOR FEDERAL AFDC WELFARE-TO-WORK PROVISIONS BEFORE AND UNDER JOB OPPORTUNITIES AND BASIC SKILLS (JOBS)

Major Federal AFDC Welfare-to-Work Provisions

Before and Under JOBS

	Before JOBS	Under JOBS
Program(s)	WIN, WIN-Demonstration, Job Search, Community Work Experience, Work Supplementation	JOBS
Administrative control	WIN: State AFDC agency and state employment service agency All others: State AFDC agency	State AFDC agency
Geographic coverage	Job Search: Statewide Other programs: Not required to be statewide	Statewide (by Oct. 1992)
Required to participate	Generally: AFDC recipients aged 16-64 with children aged 6 or over; nonparent teens aged 16-18 and not in school	Generally: AFDC recipients aged 16-59 with children aged 3 or over; teen parents with children of any age; nonparent teens aged 16-18 and not in school
Participation requirements	WIN: Those required to participate were to be registered, but no participation rate was specified	For federal fiscal years 1990-91, 7 percent of those required to participate must average 20 hours in activities a week; this rises to 11 percent in 1992-93, 15 percent in 1994, and 20 percent in 1995
Targeting requirements	WIN: Priorities stated, but not enforced: 1. Unemployed parents who are principal earners in 2-parent families 2. Mothers who volunteer 3. Other mothers and pregnant women under the age of 19 who are required to participate 4. Dependent children and relatives aged 16 or over	At least 55 percent of JOBS funds must be spent on the following: 1. AFDC recipients or applicants who have received AFDC for any 36 months out of the past 5 years 2. AFDC parents under the age of 24 who (a) have not completed high school and are not enrolled in high school (or the equivalent) or (b) had little or no work experience in the preceding year 3. Members of AFDC families in which the youngest child will in 2 years be old enough to make the family ineligible for aid
Activities	Could include, but not limited to, development of employability plan, job placement assistance, training, work experience, and subsidized employment	Must include assessment of employability, development of employability plan, education (high school, basic and remedial, English proficiency), job skills training, job readiness, and job development and placement Plus at least 2 optional activities: job search, work experience, on-the-job training, or work supplementation May include postsecondary education and other approved activities
Supportive services	Child care and other services needed to find employment or take training	Child care guaranteed if needed; transportation and other work-related assistance provided

Prepared by: United States General Accounting Office

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APPENDIX B

PARTICIPATING COUNTIES IN THE RESEARCH

Counties Included In Research

County	Number of County Sites
Butler	1
Covington	1
Etowah	1
Jefferson	8
Macon	1
Madison	2
Marengo	2
Marshall	2
Mobile	2
Montgomery	2
Shelby	1
Talladega	2
Tuscaloosa	2
Total	27

APPENDIX C

INSTRUMENTS THAT MEASURE AFFECTIVE ATTRIBUTES

Instruments that Measure Affective Attributes

Instrument	Reading requirements
Adult Personality Inventory (API)	At least grade 5 reading
Bloom Sentence Completion Survey (BSCS)	No reading
California Psychological Inventory (CPI)	At least grade 6 reading
Coopersmith Self-esteem Inventory (SEI)	At least grade 4 reading*
Gordon Personal Profile-Inventory (GPP-I)	At least grade 7 reading
Jackson Personality Inventory (JPI)	At least grade 7 reading
Self-Concept Evaluation of Location Form (SELF)	At least grade 5 reading*
Self-Description Inventory	At least grade 8 reading
Self-Directed Learning Readiness Scale (SDLRS)	At least grade 4 reading*
Self-Esteem Questionnaire (SEQ-3)	At least grade 5 reading*
Tennessee Self-Concept Scale (TSCS)	At least grade 6 reading*
Wahler Self-Description Inventory (WSDI)	At least grade 6 reading*

*These instruments can easily be administered orally so that students with reading skills as low as grade 1 can respond (Jackson, 1990).